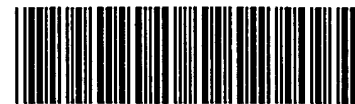


## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/534419  
Source: PCT  
Date Processed by STIC: 05/19/05

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PCT

## RAW SEQUENCE LISTING

DATE: 05/19/2005

PATENT APPLICATION: US/10/534,419

TIME: 10:35:23

Input Set : A:\Xenon 145.txt

Output Set: N:\CRF4\05182005\J534419.raw

4 <110> APPLICANT: Xenon Genetics Inc.  
 6 <120> TITLE OF INVENTION: HSAN II Related Gene and Expression Products  
 7 and Uses Thereof  
 9 <130> FILE REFERENCE: 760050-145  
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/534,419  
 C--> 12 <141> CURRENT FILING DATE: 2005-05-06  
 14 <150> PRIOR APPLICATION NUMBER: US/60/425,601  
 15 <151> PRIOR FILING DATE: 2002-11-12  
 17 <150> PRIOR APPLICATION NUMBER: US/60/502,453  
 18 <151> PRIOR FILING DATE: 2003-09-12  
 20 <160> NUMBER OF SEQ ID NOS: 33  
 22 <170> SOFTWARE: PatentIn version 3.0  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 2786  
 26 <212> TYPE: DNA  
 27 <213> ORGANISM: Homo sapiens  
 29 <400> SEQUENCE: 1  
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 31 aacccaggag gcggaggttg cagtaagcca agattgtcac tgcactccag cctgggagaa 120  
 32 agagggaagac tccatctcaa aaaaaagaaa aaagaaattt catggttatg caactcttat 180  
 33 ttatgatcag aaaaatggac attttgtgat ttaactctgt aacatgtttc atgtagtaaa 240  
 34 aatataataa aactattaat catctagctt gggagagata ggagaaagac attactgtca 300  
 35 ctagtcaaat tatatatctt ttactatcca ccaaaaatct cttctgattt ctgggttagaa 360  
 36 ggcatactat taattgataa gaaaataaaa ctgaaggcct ctaacatatc acagggtaat 420  
 37 aagaatatag ggaaagttag ttcaatagtt taaattaaag cacacttctt acagtataga 480  
 38 actagtcggg cttttatgcc ttgttttagt tcttactctt cctttaactc tttttctggt 540  
 39 gatgtaattt acattaatgc ttaagagtga actttttaag tgtgggtaaa aacgaaataa 600  
 40 ttacttacaa agtttaattc ttccatttcc tttgagagag gaaagttatg gaaaagcagc 660  
 41 tcttatctaa agcaaagagc ccacagattg atttcattgg ccctggatgt atttaatgga 720  
 42 tttttactat gcacataatt tccagaagca ttgttattta tttattaatt ataaatttag 780  
 43 tgtaaccatt tcataggggt acacagaact acccagttgt gcatgtctga tgtaatttca 840  
 44 catatgaatg tatgaattac ttgtcttatt catgttgata cagcctcagt ccatggcgca 900  
 45 tccgtgtggg gggaccccaa cataccaga atcacagata tttttcccaa ctattcatga 960  
 46 acgtccagtt tctttttcac cacctcccac ctgcccaccg aaagtagcca tttcccagcg 1020  
 47 gcgtaagagc acctccttcc tgggaagcca aactcaccac ttccaacccc tgctgaggac 1080  
 48 tgttggccaa agtcttcttc cacctggtgg cagcccaact aactggacac cagaggccgt 1140  
 49 agttatgttg ggtactacag ccagtagagt aactggagag tcatgtgaga tacaggcca 1200  
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 52 ccgggtggca gaacagtatg agggcattcc atacaactca tcagtactgt caagtcctat 1380  
 53 gaaacagata cctgaacaga agccagtaca agggggccct acttcaagtt ctgtctttga 1440  
 54 atttccatct ggacaggctt tcctggtagg acaccttcag aatctaagat tagattctgg 1500  
 55 attgggtccg ggatctcccc tctctagtat ttctgcacct atcagtacag atgctacacg 1560

P.6

## RAW SEQUENCE LISTING

DATE: 05/19/2005

PATENT APPLICATION: US/10/534,419

TIME: 10:35:23

Input Set : A:\Xenon 145.txt

Output Set: N:\CRF4\05182005\J534419.raw

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56 tttgaaat ttt caccctgtct ttgttctca ttctgcgct gctgtgttaa ctcataacaa 1620
57 tgagagcaga agcaactgtg tatttgaatt tcatgttcac acaccaagct cctcttcagg 1680
58 agaaggaggt ggaattttac ctccagcgtg ttaccgaaat cggcagggtg cagtggactt 1740
59 gaatcaagaa gaactgcctc ctcaatcagt tggattacat ggctacttgc agcctgtgac 1800
60 tgaagaaaag cataattacc atgccccaga attgaccgtt tctgtggtag agcctatcgg 1860
61 acagaactgg ccaataggaa gcccagaata ttccagtgat tcctcacaaa tcacttcttc 1920
62 agaccccgat gattttcagt cacctcccc tacaggggga gcagctgcac cttttggctc 1980
63 tgacgtctca atgcccctta tccatctgcc tcagacagtg ttacaagaat cccactttt 2040
64 cttctgtttc cccaaggaa ccacatctca gcaggtctta actgcctcat tttcttcagg 2100
65 aggatctgca cttcatccac aggttatagg aaaacttcca caattatttt aaactaccct 2160
66 actttgcacc ataacattta aattttctat tccttatttc cctgaatcat ggattttgga 2220
67 gaaatattgt ttaattttat cagtagagtt tccccatctt tgggggggtg tgaactacat 2280
68 atatgcattt aaaaacaaaa tgtgagagaa gctacctgat ttacctatta tatgtgaaaa 2340
69 ccagtggaaa aaacacaaaa actagaattt tagtcattct tcacaatcac gacttctatg 2400
70 cacgttattt tcaaccagta gtgaaaatgc aagtgtatgt aatgtatggt tgaccagca 2460
71 ttatttagga atacaaatct taagtattac tttcttctc caaacaagt tttaaaaaat 2520
72 aggataaatt ttttttctat aaaatataaa acatggaaaa taggggaatg tgtttttgag 2580
73 gtaatatata taatacacag aattttcatt agtgtcgaag gatctaaaaa gacaaagtat 2640
74 atcatgggaa taaaaaaaaga tagaaaagga aacagtttag gaatttgcct taacaaatga 2700
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76 taaaatgcta attcataaaa ttaagg 2786

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79 &lt;210&gt; SEQ ID NO: 2

80 &lt;211&gt; LENGTH: 434

81 &lt;212&gt; TYPE: PRT

82 &lt;213&gt; ORGANISM: Homo sapiens

84 &lt;400&gt; SEQUENCE: 2

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85 Met Tyr Glu Leu Leu Val Leu Phe Met Leu Ile Gln Pro Gln Ser Met
86 1 5 10 15
88 Ala His Pro Cys Gly Gly Thr Pro Thr Tyr Pro Glu Ser Gln Ile Phe
89 20 25 30
91 Phe Pro Thr Ile His Glu Arg Pro Val Ser Phe Ser Pro Pro Thr
92 35 40 45
94 Cys Pro Pro Lys Val Ala Ile Ser Gln Arg Arg Lys Ser Thr Ser Phe
95 50 55 60
97 Leu Glu Ala Gln Thr His His Phe Gln Pro Leu Leu Arg Thr Val Gly
98 65 70 75 80
100 Gln Ser Leu Leu Pro Pro Gly Gly Ser Pro Thr Asn Trp Thr Pro Glu
101 85 90 95
103 Ala Val Val Met Leu Gly Thr Thr Ala Ser Arg Val Thr Gly Glu Ser
104 100 105 110
106 Cys Glu Ile Gln Val His Pro Met Phe Glu Pro Ser Gln Val Tyr Ser
107 115 120 125
109 Asp Tyr Arg Pro Gly Leu Val Leu Pro Glu Glu Ala His Tyr Phe Ile
110 130 135 140
112 Pro Gln Glu Ala Val Tyr Val Ala Gly Val His Tyr Gln Ala Arg Val
113 145 150 155 160
115 Ala Glu Gln Tyr Glu Gly Ile Pro Tyr Asn Ser Ser Val Leu Ser Ser
116 165 170 175
118 Pro Met Lys Gln Ile Pro Glu Gln Lys Pro Val Gln Gly Gly Pro Thr

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/534,419

DATE: 05/19/2005

TIME: 10:35:23

Input Set : A:\Xenon 145.txt

Output Set: N:\CRF4\05182005\J534419.raw

```

119          180          185          190
121 Ser Ser Ser Val Phe Glu Phe Pro Ser Gly Gln Ala Phe Leu Val Gly
122          195          200          205
124 His Leu Gln Asn Leu Arg Leu Asp Ser Gly Leu Gly Pro Gly Ser Pro
125          210          215          220
127 Leu Ser Ser Ile Ser Ala Pro Ile Ser Thr Asp Ala Thr Arg Leu Lys
128 225          230          235          240
130 Phe His Pro Val Phe Val Pro His Ser Ala Pro Ala Val Leu Thr His
131          245          250          255
133 Asn Asn Glu Ser Arg Ser Asn Cys Val Phe Glu Phe His Val His Thr
134          260          265          270
136 Pro Ser Ser Ser Ser Gly Glu Gly Gly Gly Ile Leu Pro Gln Arg Val
137          275          280          285
139 Tyr Arg Asn Arg Gln Val Ala Val Asp Leu Asn Gln Glu Glu Leu Pro
140          290          295          300
142 Pro Gln Ser Val Gly Leu His Gly Tyr Leu Gln Pro Val Thr Glu Glu
143 305          310          315          320
145 Lys His Asn Tyr His Ala Pro Glu Leu Thr Val Ser Val Val Glu Pro
146          325          330          335
148 Ile Gly Gln Asn Trp Pro Ile Gly Ser Pro Glu Tyr Ser Ser Asp Ser
149          340          345          350
151 Ser Gln Ile Thr Ser Ser Asp Pro Ser Asp Phe Gln Ser Pro Pro Pro
152          355          360          365
154 Thr Gly Gly Ala Ala Ala Pro Phe Gly Ser Asp Val Ser Met Pro Phe
155          370          375          380
157 Ile His Leu Pro Gln Thr Val Leu Gln Glu Ser Pro Leu Phe Phe Cys
158 385          390          395          400
160 Phe Pro Gln Gly Thr Thr Ser Gln Gln Val Leu Thr Ala Ser Phe Ser
161          405          410          415
163 Ser Gly Gly Ser Ala Leu His Pro Gln Val Ile Gly Lys Leu Pro Gln
164          420          425          430
166 Leu Phe
169 <210> SEQ ID NO: 3
170 <211> LENGTH: 206
171 <212> TYPE: PRT
172 <213> ORGANISM: Homo sapiens
174 <400> SEQUENCE: 3
175 Met Tyr Glu Leu Leu Val Leu Phe Met Leu Ile Gln Pro Gln Ser Met
176 1          5          10          15
178 Ala His Pro Cys Gly Gly Thr Pro Thr Tyr Pro Glu Ser Gln Ile Phe
179          20          25          30
181 Phe Pro Thr Ile His Glu Arg Pro Val Ser Phe Ser Pro Pro Pro Thr
182          35          40          45
184 Cys Pro Pro Lys Val Ala Ile Ser Gln Arg Arg Lys Ser Thr Ser Phe
185          50          55          60
187 Leu Glu Ala Gln Thr His His Phe Gln Pro Leu Leu Arg Thr Val Gly
188 65          70          75          80
190 Gln Ser Leu Leu Pro Pro Gly Gly Ser Pro Thr Asn Trp Thr Pro Glu
191          85          90          95

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## RAW SEQUENCE LISTING

DATE: 05/19/2005

PATENT APPLICATION: US/10/534,419

TIME: 10:35:23

Input Set : A:\Xenon 145.txt

Output Set: N:\CRF4\05182005\J534419.raw

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193 Ala Val Val Met Leu Gly Thr Thr Ala Ser Arg Val Thr Gly Glu Ser
194      100      105      110
196 Cys Glu Ile Gln Val His Pro Met Phe Glu Pro Ser Gln Val Tyr Ser
197      115      120      125
199 Asp Tyr Arg Pro Gly Leu Val Leu Pro Glu Glu Ala His Tyr Phe Ile
200      130      135      140
202 Pro Gln Glu Ala Val Tyr Val Ala Gly Val His Tyr Gln Ala Arg Val
203 145      150      155      160
205 Ala Glu Gln Tyr Glu Gly Ile Pro Tyr Asn Ser Ser Val Leu Ser Ser
206      165      170      175
208 Pro Met Lys Gln Ile Pro Glu Gln Lys Pro Val Gln Gly Gly Pro Thr
209      180      185      190
211 Ser Ser Ser Val Phe Asp Phe His Leu Asp Arg Leu Ser Trp
212      195      200      205
215 <210> SEQ ID NO: 4
216 <211> LENGTH: 318
217 <212> TYPE: PRT
218 <213> ORGANISM: Homo sapiens
220 <400> SEQUENCE: 4
221 Met Tyr Glu Leu Leu Val Leu Phe Met Leu Ile Gln Pro Gln Ser Met
222 1      5      10      15
224 Ala His Pro Cys Gly Gly Thr Pro Thr Tyr Pro Glu Ser Gln Ile Phe
225      20      25      30
227 Phe Pro Thr Ile His Glu Arg Pro Val Ser Phe Ser Pro Pro Pro Thr
228      35      40      45
230 Cys Pro Pro Lys Val Ala Ile Ser Gln Arg Arg Lys Ser Thr Ser Phe
231      50      55      60
233 Leu Glu Ala Gln Thr His His Phe Gln Pro Leu Leu Arg Thr Val Gly
234 65      70      75      80
236 Gln Ser Leu Leu Pro Pro Gly Gly Ser Pro Thr Asn Trp Thr Pro Glu
237      85      90      95
239 Ala Val Val Met Leu Gly Thr Thr Ala Ser Arg Val Thr Gly Glu Ser
240      100      105      110
242 Cys Glu Ile Gln Val His Pro Met Phe Glu Pro Ser Gln Val Tyr Ser
243      115      120      125
245 Asp Tyr Arg Pro Gly Leu Val Leu Pro Glu Glu Ala His Tyr Phe Ile
246      130      135      140
248 Pro Gln Glu Ala Val Tyr Val Ala Gly Val His Tyr Gln Ala Arg Val
249 145      150      155      160
251 Ala Glu Gln Tyr Glu Gly Ile Pro Tyr Asn Ser Ser Val Leu Ser Ser
252      165      170      175
254 Pro Met Lys Gln Ile Pro Glu Gln Lys Pro Val Gln Gly Gly Pro Thr
255      180      185      190
257 Ser Ser Ser Val Phe Glu Phe Pro Ser Gly Gln Ala Phe Leu Val Gly
258      195      200      205
260 His Leu Gln Asn Leu Arg Leu Asp Ser Gly Leu Gly Pro Gly Ser Pro
261      210      215      220
263 Leu Ser Ser Ile Ser Ala Pro Ile Ser Thr Asp Ala Thr Arg Leu Lys
264 225      230      235      240

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## RAW SEQUENCE LISTING

DATE: 05/19/2005

PATENT APPLICATION: US/10/534,419

TIME: 10:35:23

Input Set : A:\Xenon 145.txt

Output Set: N:\CRF4\05182005\J534419.raw

```

266 Phe His Pro Val Phe Val Pro His Ser Ala Pro Ala Val Leu Thr His
267                245                250                255
269 Asn Asn Glu Ser Arg Ser Asn Cys Val Phe Glu Phe His Val His Thr
270                260                265                270
272 Pro Ser Ser Ser Ser Gly Glu Gly Gly Gly Ile Leu Pro Gln Arg Val
273                275                280                285
275 Tyr Arg Asn Arg Gln Val Ala Val Asp Leu Asn Gln Glu Glu Leu Pro
276                290                295                300
278 Pro Gln Ile Ser Trp Ile Thr Trp Leu Leu Ala Ala Cys Asp
279 305                310                315
282 <210> SEQ ID NO: 5
283 <211> LENGTH: 314
284 <212> TYPE: PRT
285 <213> ORGANISM: Homo sapiens
287 <400> SEQUENCE: 5
288 Met Tyr Glu Leu Leu Val Leu Phe Met Leu Ile Gln Pro Gln Ser Met
289 1                5                10                15
291 Ala His Pro Cys Gly Gly Thr Pro Thr Tyr Pro Glu Ser Gln Ile Phe
292                20                25                30
294 Phe Pro Thr Ile His Glu Arg Pro Val Ser Phe Ser Pro Pro Pro Thr
295                35                40                45
297 Cys Pro Pro Lys Val Ala Ile Ser Gln Arg Arg Lys Ser Thr Ser Phe
298                50                55                60
300 Leu Glu Ala Gln Thr His His Phe Gln Pro Leu Leu Arg Thr Val Gly
301 65                70                75                80
303 Gln Ser Leu Leu Pro Pro Gly Gly Ser Pro Thr Asn Trp Thr Pro Glu
304                85                90                95
306 Ala Val Val Met Leu Gly Thr Thr Ala Ser Arg Val Thr Gly Glu Ser
307                100               105               110
309 Cys Glu Ile Gln Val His Pro Met Phe Glu Pro Ser Gln Val Tyr Ser
310                115               120               125
312 Asp Tyr Arg Pro Gly Leu Val Leu Pro Glu Glu Ala His Tyr Phe Ile
313                130               135               140
315 Pro Gln Glu Ala Val Tyr Val Ala Gly Val His Tyr Gln Ala Arg Val
316 145                150                155                160
318 Ala Glu Gln Tyr Glu Gly Ile Pro Tyr Asn Ser Ser Val Leu Ser Ser
319                165                170                175
321 Pro Met Lys Gln Ile Pro Glu Gln Lys Pro Val Gln Gly Gly Pro Thr
322                180                185                190
324 Ser Ser Ser Val Phe Glu Phe Pro Ser Gly Gln Ala Phe Leu Val Gly
325                195                200                205
327 His Leu Gln Asn Leu Arg Leu Asp Ser Gly Leu Gly Pro Gly Ser Pro
328                210                215                220
330 Leu Ser Ser Ile Ser Ala Pro Ile Ser Thr Asp Ala Thr Arg Leu Lys
331 225                230                235                240
333 Phe His Pro Val Phe Val Pro His Ser Ala Pro Ala Val Leu Thr His
334                245                250                255
336 Asn Asn Glu Ser Arg Ser Asn Cys Val Phe Glu Phe His Val His Thr
337                260                265                270

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/534,419

DATE: 05/19/2005  
TIME: 10:35:24

Input Set : A:\Xenon 145.txt  
Output Set: N:\CRF4\05182005\J534419.raw

**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:13; Xaa Pos. 326,327,328,329,330,331,332,333,334,335,336,337,338,339  
Seq#:13; Xaa Pos. 340,341,342,343,344,345,346,347,348,349,350,351,352,353  
Seq#:13; Xaa Pos. 354,355,356,357,358,359,360,361,362,363,364,365,366,367  
Seq#:13; Xaa Pos. 368,369,370,371,372,373,374,375,376,377,378,379,380,381  
Seq#:13; Xaa Pos. 382,383,384,385,386,387,388,389,390,391,392,393,394,395  
Seq#:13; Xaa Pos. 396,397

**Invalid <213> Response:**

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:24,25,26,27,28,29,30,31,32,33

**VERIFICATION SUMMARY**

PATENT APPLICATION: **US/10/534,419**

DATE: 05/19/2005

TIME: 10:35:24

Input Set : **A:\Xenon 145.txt**

Output Set: **N:\CRF4\05182005\J534419.raw**

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number

L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:1116 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:320

M:341 Repeated in SeqNo=13